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REMARKS/ARGUMENTS

Favorable reconsideration of this application is requested in view of the amendments above and the remarks which follow.

I. Disposition of Claims

Claims 1-10 and 12-23 are pending in this application. Claim 11 has been cancelled, and the limitation of claim 11 has been included in claim 1. The claims have been amended as set forth above. New matter has not been added to the claims by way of these amendments. Claim 23 has been amended to separately cover the embodiment where the grid of stacked layers includes a semiconductor such as silicon (Si).

II. Double Patenting

Claims 1-5 and 18-20 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of U.S. Patent No. 6,813,077 (Borrelli et al.). Reconsideration of this rejection is respectfully requested.

Amended claim 1 recites a grid polarizer comprising a substrate and a plurality of stacked metal and semiconductor or dielectric layers having a width w disposed on the substrate and forming a parallel grid of stacked layers. The stacked layers are spaced apart to form a repetition space between the stacked layers such that no diffraction orders are allowed to propagate except the zero order, resulting in a grid polarizer that is capable of transmitting substantially all illumination of a given polarization while suppressing at least a portion of the illumination reflected due to an orthogonal polarization component. The repetition space satisfies the relation: $\Lambda < \frac{\lambda}{n_t - n_i \sin \theta}$, where λ represents the operating wavelength of the polarizer, n_t represents the index of the transmitting media, and n_i represents the index of the incidence media.

Claims 1-3 of Borrelli et al. do not include the repetition space limitation as recited in claim 1. Withdrawal of the double patenting rejection of claim 1 over claims 1-3 of Borrelli et al. is respectfully requested. Claims 2-5 and 18-20, being dependent from claim 1, are likewise patentable over claims 1-3 of Borrelli et al.

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III. Claim Objections

Claim 5 was objected to because it listed silicon (Si) as a dielectric material. The Examiner asserts that Si is a semiconductor and is not generally referred to as a dielectric or insulator. In response, the term semiconductor has been introduced into the claims as an alternative to a dielectric. Withdrawal of the objection to claim 5 is respectfully requested.

IV. Rejections under 35 U.S.C. §112

Claim 2 was rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Specifically, the Examiner asserts that it is unclear how "all illumination of a given polarization" can be both substantially transmitted and substantially suppressed as required by the combined limitations of claims 1 and 2. Claim 2 has been amended to more particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Withdrawal of the rejection of claim 2 under 35 U.S.C. §112, second paragraph, is respectfully requested.

Claims 17, 19, and 20 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Claim 17 has been amended to more particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Claims 19 and 20 have been amended to depend from claim 18, which the Examiner has not rejected under 35 U.S.C. §112, second paragraph. Withdrawal of the rejection of claims 17, 19, and 20 under 35 U.S.C. §112, second paragraph, is respectfully requested.

V. Rejections under 35 U.S.C. §102

Claims 1-8, 15, and 20 were rejected under 35 U.S.C. §102(e) as being anticipated by Kurtz et al. (U.S. Patent No. 6,532,111). Reconsideration of this rejection is respectfully requested.

Kurtz et al. do not disclose or teach a grid polarizer having grid stacked layers with a repetition space defined by $\Lambda < \frac{\lambda}{n_i - n_t \sin \theta}$, as recited in amended claim 1. The repetition space recited in claim 1 is such that only zero order diffraction orders are allowed to propagate.

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Because Kurtz et al. do not disclose each and every limitation of claim 1, Kurtz et al. do not anticipate claim 1. Withdrawal of the rejection of claim 1 over Kurtz et al. is respectfully requested. Claims 2-8, 15, and 20, being dependent from Kurtz et al., are likewise patentable in view of the foregoing arguments.

VI. Rejections under 35 U.S.C. §103

Claims 9-14, 16, and 18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kurtz et al. Claim 11 has been cancelled. Accordingly, rejection of this claim is moot. Reconsideration of the rejection of claims 9, 10, 12-14, 16, and 18 is respectfully requested.

Claims 9, 10, 12-14, 16, and 18 depend from claim 1, which recites a grid polarizer having grid stacked layers with a repetition space defined by $\Lambda < \frac{\lambda}{n_i - n_t \sin \theta}$. As previously

discussed, Kurtz et al. do not teach a grid polarizer having grid stacked layers with a repetition space defined by $\Lambda < \frac{\lambda}{n_i - n_t \sin \theta}$. As previously discussed, the repetition space recited in claim

1 is such that only zero order diffraction orders are allowed to propagate, thereby allowing the grid polarizer to operate efficiently. The Examiner has not cited any other references to supplement the teachings of Kurtz et al.

From the foregoing, claims 9, 10, 12-14, 16, and 18, inasmuch as they depend from claim 1, are patentable over Kurtz et al. Withdrawal of the rejection of claims 9, 10, 12-14, 16, and 18 over Kurtz et al. is respectfully requested.

VII. Conclusion

The rejected claims have been amended and/or shown to be allowable over the prior art. Applicant believes that this paper is fully responsive to all the grounds of rejection cited by the Examiner in the Office Action dated June 30, 2005, and respectfully requests that a timely Notice of Allowance be issued in this case.

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Please apply any charges not covered or credits in connection with this filing to Deposit Account No. 03-3325 (ref. SP02-268).

Respectfully submitted,

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